

SURVEY REPORT
**STRATEGIC APPROACHES TO
AND RESEARCH ASSESSMENT OF
OPEN SCIENCE**
2024

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Colophon

October 2024

Survey Report 'Strategic Approaches to and Research Assessment of Open Science'

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STRATEGIC APPROACHES TO AND RESEARCH ASSESSMENT OF OPEN SCIENCE

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Introduction

This report provides a comprehensive insight into the roles played by research funding and performing organisations in advancing open science. Science Europe collected information about the strategic approaches of its members through a survey, including on their research assessment, monitoring, and evidence-gathering activities. The findings in this report will reinforce the impact of open science in research and innovation policy discussions, and facilitate mutual learning and promote policy alignment between member organisations.

Open science (also referred to as open research) is defined as the [comprehensive ambition](#) to make research knowledge openly available, accessible, and reusable for everyone. For the purposes of this survey report, this means that open science includes, but is not limited to a wide range of policies and research practices like open access to research outputs (publications, data, software, and so on), open research methods, open evaluation, engagement with society, citizen science, open education, and so on.

Science Europe is an association representing 40 public research funding and performing organisations across 29 European countries. Together with its members, it supports open science as an [integral component](#) of a well-functioning research system, and as a [key contributor](#) to the evolution of research cultures. [Research assessment reform](#) is key to both these ambitions. These strategic goals are central to our shared responsibility in shaping the future of research in Europe and beyond.

Context

The findings of this survey offer a glimpse into the evolving landscape of open science and research assessment reform. Research community stakeholders and policy makers are actively involved, and are working together on ambitious initiatives to create a more open research culture.

Moving beyond the initial focus on open access to research publications, discussions on open science have become more ambitious. They aim to create an open scholarly communication system without barriers between researchers, with meaningful involvement of society. This can be seen most clearly when comparing the focus on open access publishing in the [Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities](#), published in October 2003, and the broad perspective on open scholarly communication in the [UNESCO Recommendation on Open Science](#), adopted almost twenty years later in November 2021.

Universities, research performing organisations, funding bodies, libraries, learned societies, infrastructures, and researchers at all stages of their careers are all part of this discussion, highlighting the broad engagement of the public research sector. Representative and advocacy organisations play an important role in this dynamic, including [cOAlition S](#), [OA2020](#), [SPARC Europe](#), and others. At the same time, there has also been a marked increase in political support for

open science. In Europe, European Commission communications ([September 2020](#)) and Council of the European Union conclusions ([June 2022](#), [May 2023](#)) illustrate the broad support for open science and research assessment reform.

Science Europe's work on open science both reflects and has contributed to the growing ambition in the open science landscape. Members started by developing and implementing pioneering policies on open access to research publications, based on a [set of shared principles](#), and refining these through [rigorous monitoring practices](#). Later, members spearheaded the promotion of Findable, Accessible, Interoperable, and Reusable (FAIR) research data by [internationally aligning](#) data management policies and procedures and ensuring the [long-term sustainability](#) of research data. Since 2021, Science Europe has expanded its goals to address open science policies in a more comprehensive way, resulting in a [strategic direction paper](#) and a [conference](#). It has also started to explore emerging elements of open science, including [research software](#).

In parallel to the broadening discussions on open science, an evolution in discussions and actions relating to research assessment has also been occurring in recent decades. Taking the San Francisco Declaration on Research Assessment ([DORA](#)) as an initial major milestone, community-driven initiatives (see the [Leiden Manifesto](#)

and [Hong Kong Principles](#)) have prompted and guided discussions, leading to policy initiatives such as Science Europe’s position and recommendation on [research assessment processes](#), the European Commission’s scoping report on [systemic research assessment reform](#), the Global Research Council’s work on [responsible research assessment](#), and more.

As advances on open science and research assessment moved in parallel, a growing mutual recognition that the higher objectives of both are inextricably linked has developed. This can be seen through the emergence of ‘research culture’ as a research policy topic. Discussions and actions aim to draw links between policy priorities, ensuring careful and consistent advances are made to our shared research system. Science Europe’s work on research culture highlights this interconnection, listing ‘Openness and Transparency’ as one of [six core values](#) that underpin effective and healthy research cultures. These values should inform all aspects of our research systems, and

an example of how they can be translated into practical action was provided through [recommendations on recognition systems](#).

Now, as research assessment reform makes major steps forward through the Coalition for Advancing Research Assessment ([CoARA](#)), it is vital that the once parallel activities and initiatives of open science and research assessment are brought together, defining common opportunities and shared challenges. This survey and consultation initiative aim to do just that.

Monitoring and evidence-gathering activities are also becoming increasingly important as open science policies and practices, as well as research assessment reform, become more widespread and ambitious. This was recently emphasised at the [G7 Science and Technology Ministers’ meeting](#) in May 2023 in Sendai, Japan. Science Europe has developed guidelines and recommendations on [open access monitoring](#) for research funding and performing organisations.

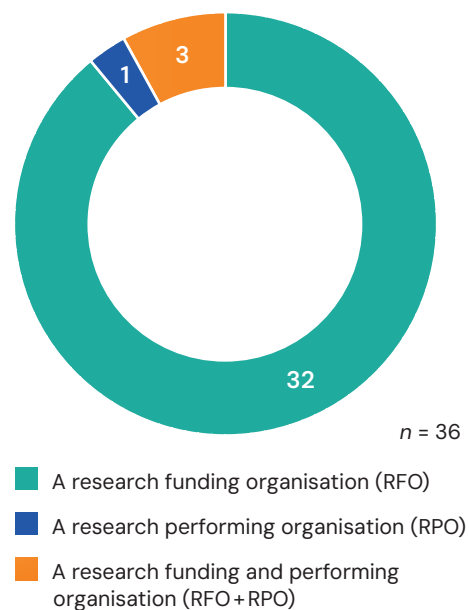
Member Survey

The survey was first conceived in May 2023 at a joint meeting of Science Europe’s [Working Group on Open Science](#) and the [Working Group on Research Culture](#). Developed between November 2023 and February 2024 by the Science Europe Office in collaboration with an expert task force, it ran from 27 March to 10 June 2024 and was accessible to all member organisations.

The survey received responses from 36 members in 28 countries (see figure 1), including 32 funding bodies, 1 research performing organisation, and 3 organisations with both funding and research performing roles. As such, the survey results predominantly reflect the perspective of public research funding organisations in Europe.

This report provides a descriptive analysis of the survey results on the strategic approaches to open science adopted by Science Europe member organisations, as well as their research assessment, monitoring, and evidence-gathering activities. It serves as the first step and foundation for a consultation process, which will continue with a series of member workshops and a tender for information (see Conclusion). The goal of this initiative is to develop strategic recommendations for how research funding and performing organisations can further advance open science.

FIGURE 1 Responding organisations



1. Strategic Approaches to Open Science

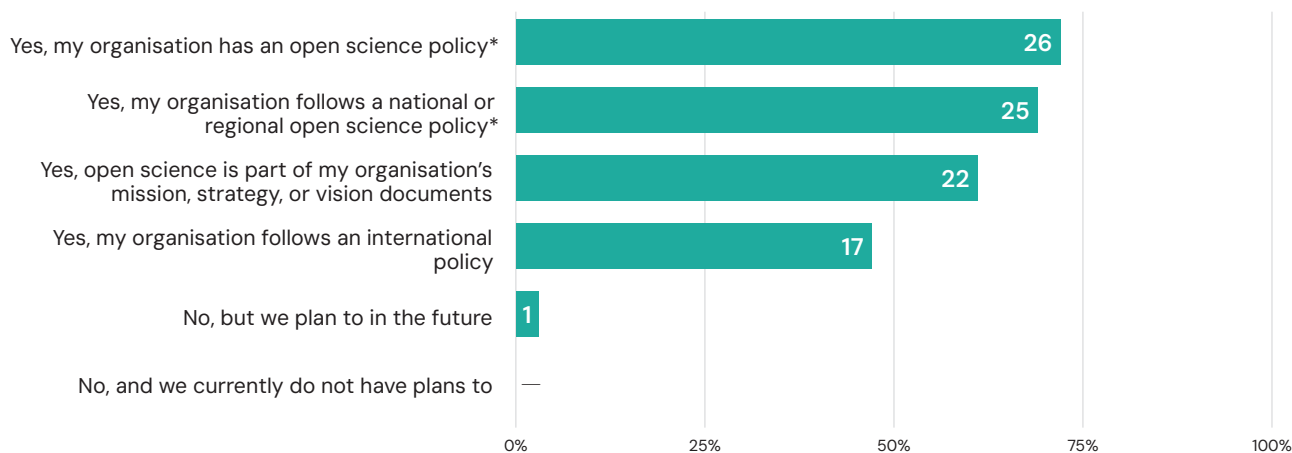
Science Europe member organisations were asked about their strategic approaches to open science as public research funding and performing organisations. The survey also asked them about the underlying values and goals of these approaches, as well as the main drivers and challenges in their development and implementation.

1.1. Documented Strategic Approaches

Participants were asked if they follow a documented strategic approach to open science or any of its elements. The phrasing of this question was carefully chosen to encompass various scenarios, including cases where open science is part of an organisation’s strategy documents, and where it is governed by dedicated policies at the organisational, regional, national, or international level. Consistent with the survey’s definition of open science (see Introduction), the question also included the phrase “open science or any of its elements” to allow respondents to elaborate on specific elements in subsequent questions.

The response to this question was nearly unanimous. Almost all responding members reported having a documented strategic approach to open science, with one exception indicating plans to develop such an approach in the future (see figure 2). This result shows that open science is most commonly embedded at the organisational level and is often also present at the national or regional level. Additionally, close to half of the respondents indicate that they follow international policies.

FIGURE 2 Documented strategic approaches to open science (multiple choice)



* or policies on one or more elements of open science

n = 36

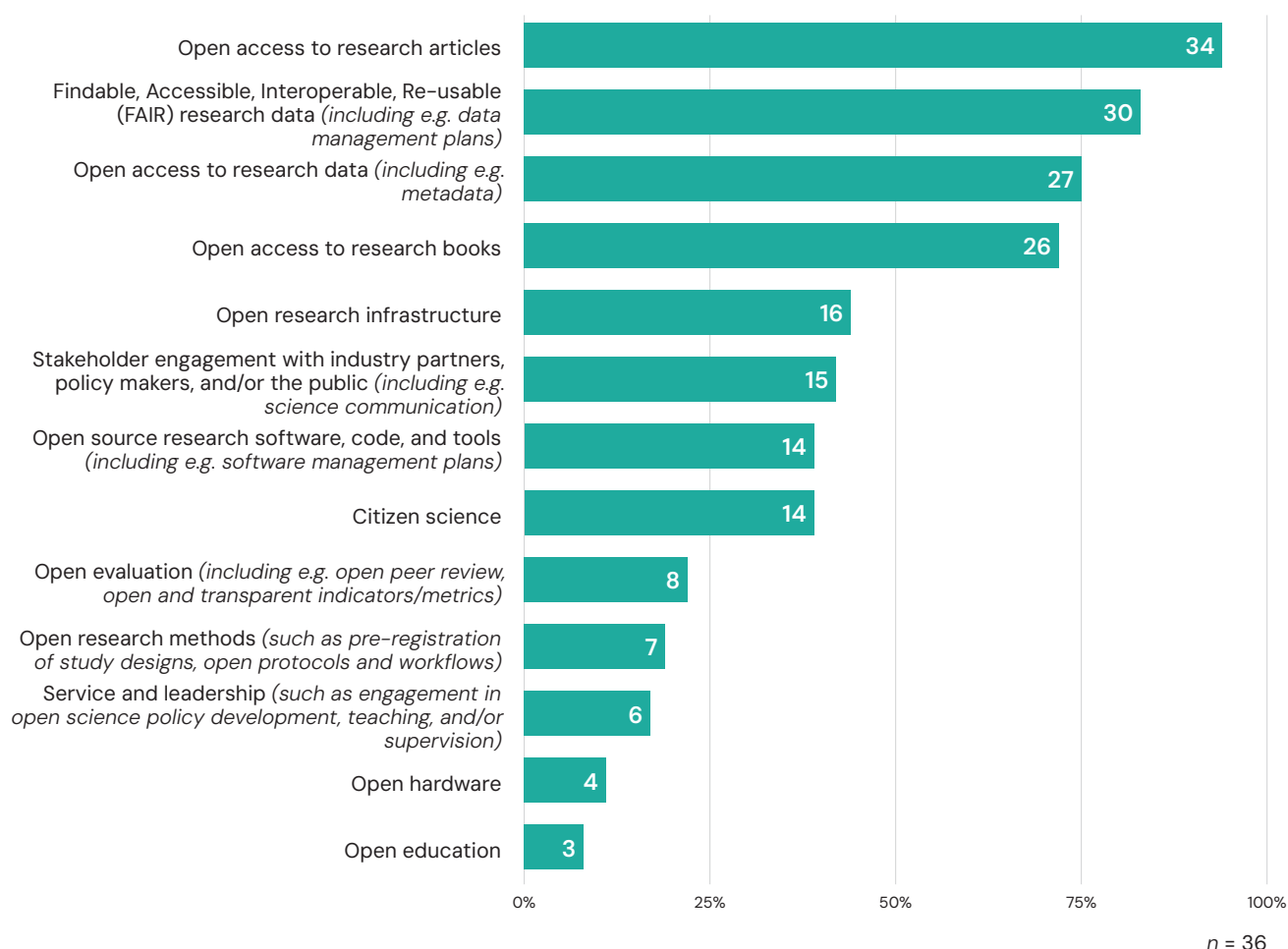
Member organisations were asked to specify which elements of open science are part of their documented strategic approaches. Consistent with the survey’s definition of open science (see Introduction), the answer options included a wide range of policies and research practices such as open access to research outputs (publications, data, software, and so on), open research methods, open evaluation, engagement with society, citizen science, open education, and more.

The response to this question shows that a broad range of open science elements are included in the strategic approaches of responding members (see figure 3). Firstly, open access to research publications and (FAIR) research data are almost universally present and deeply embedded within responding organisations. Secondly, nearly half of the respondents also incorporate open infrastructures, stakeholder engagement, open source research software, and citizen science into

their strategies. Thirdly, a small number of responding organisations extend their approaches even further to include open evaluation, open research methods, service and leadership, open hardware, and open education. While the survey did not address the evolution of these elements

over time, this response establishes a recurring pattern for the survey results, one that indicates that strategic approaches are expanding beyond traditional elements like open access, and are starting to encompass a broader array of open science policies and practices.

FIGURE 3 Elements of open science included in strategic approaches (multiple choice)



Additional comments from responding members provide more information on the robustness and evolution of open science policies. These comments reference policies at the organisational, regional, national, and international levels, and frequently highlight the interaction and alignment between these levels, which together form a robust framework. They also reveal a mix of comprehensive open science policies and those targeting specific elements. Consistent with our previous observations (see figure 3), policies on open access to research publications and research data are most commonly mentioned, while to a lesser extent we also find references to policies for other elements of open science.

The comments also trace the development of the current policy framework over the past two decades. While most cited policies are relatively recent, several examples indicate they build on top of older plans at the organisational, regional, and national levels. References to international policies illustrate the evolution over the last twenty years, from the initial focus on open access publishing in the [Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities](#) (2003) to the broad perspective on open scholarly communication in the [UNESCO Recommendation on Open Science](#) (2021).

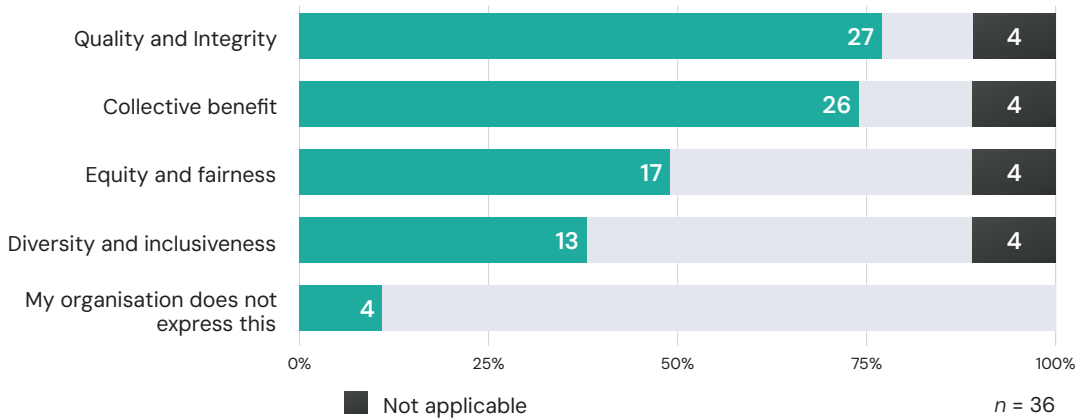
1.2. Values and Goals

Participants were asked about the underlying values and goals of their strategic approaches to open science. These questions explored open science as a means to an end, providing insight into how members view its contribution to the [evolution of research culture](#). The answer options were based on the values and guiding principles defined in the [UNESCO Recommendation on Open Science](#).

The response to the question on values reveals a strong connection between open science and the

quality and integrity of research, as well as its benefits to humanity as a whole (see figure 4). These values are part of the core mission of responding members. Additionally, there is a notable but less pronounced association between open science and the principles of equity and fairness, and diversity and inclusiveness. Although other surveys indicate that responding members are [committed to equality, diversity, inclusion, and belonging](#), a direct link between these priorities and open science is less clearly established.

FIGURE 4 Values of strategic approaches to open science (multiple choice)



The response to the question on goals confirms the strong link between open science and research quality (see figure 5). Transparency, scrutiny, critique, and reproducibility are almost universally regarded by responding members as goals for their documented strategic approaches to open science. The response also indicates a broader range of goals pursued by a majority of

responding members. These include collaboration, participation and inclusion, responsibility, respect and accountability, equality of opportunities, and sustainability. Each of these goals is pursued by more than or close to half of the members. Overall, the response demonstrates multifaceted ambitions for open science.

FIGURE 5 Goals of strategic approaches to open science (multiple choice)



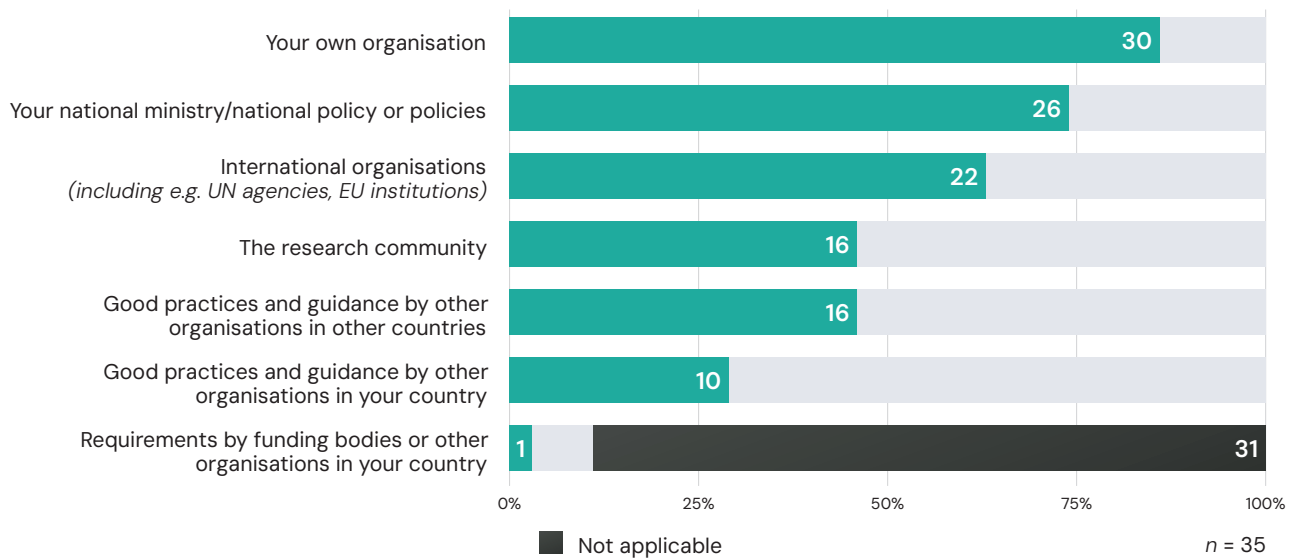
1.3. Drivers and Challenges

The survey asked member organisations about the primary drivers behind their strategic approaches to open science, as well as the main challenges they face in developing and implementing these approaches.

The response indicates that responding organisations have a mandate to define their own approach to open science (see figure 6). Almost all responding members identify themselves as the primary driver for their approach. National minis-

tries and policies, and international organisations are also identified as playing a significant role in over half the cases. In comparison, research communities and good practices from other countries or their own were less frequently recognised as primary drivers. The comparatively low recognition of research communities as a primary driver is striking. Further discussion is needed to understand whether and to what extent this view is shared with other research stakeholders, not least the communities themselves.

FIGURE 6 Primary drivers behind strategic approaches to open science (multiple choice)



Member organisations were asked two separate questions regarding the main challenges in developing and implementing their strategic approaches to open science. The response reveals a similar pattern for both, with only minor differences (see figure 7). Financial concerns emerge as the most significant challenge in both phases. Additionally, concerns about the impact on researchers and their careers are substantial during both development and implementation. Other challenges cited by around half of the responding members include monitoring, legal concerns, and a few others. Looking at the differences between the responses to the two questions, challenges such as monitoring, lack of awareness and/or knowledge among the research community, resistance from the research community, and lack of capacity in the organisation become noticeably more prominent in the implementation phase.

Taken together, these drivers and challenges create a dynamic and evolving backdrop for the development and implementation of strategic

approaches to open science. Reflecting this, a large majority of responding members indicate plans to review their approaches in the future (see figure 8).

Additional comments from responding members provide further insight into the objectives and motivations behind their review processes. These comments reveal that most responding members regularly update their own policies or participate in the review of regional and national policies. Furthermore, international policies are often cited as significant drivers for these review processes, with responding organisations aligning their policies with the agreements achieved in CoARA, COalition S, EOSC Association, and UNESCO.

Two primary objectives for the review processes emerge from the comments. Firstly, responding members are broadening their strategic approaches beyond traditional elements like open access, incorporating a wider range of open science policies and practices. Previous indications

of this trend were seen in figure 3. Secondly, the approach to open access publishing is being re-evaluated. Moving beyond the transformative agreements and article processing charges

that have dominated the field, responding members are considering alternative models (see example A).

FIGURE 7 Main challenges to developing and implementing strategic approaches to open science (multiple choice)

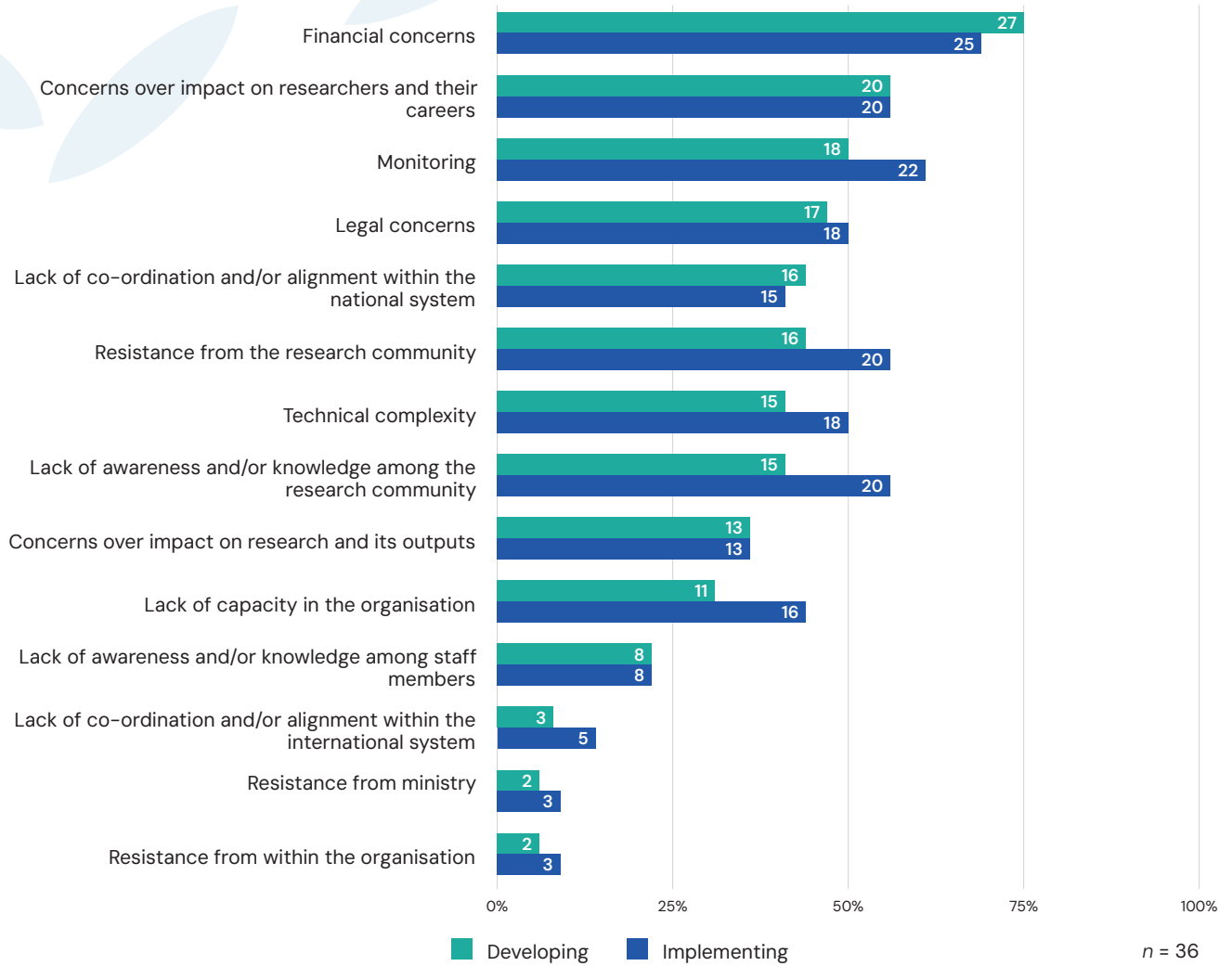
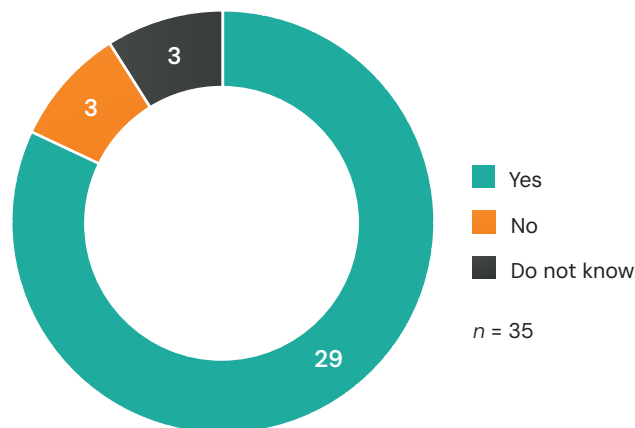
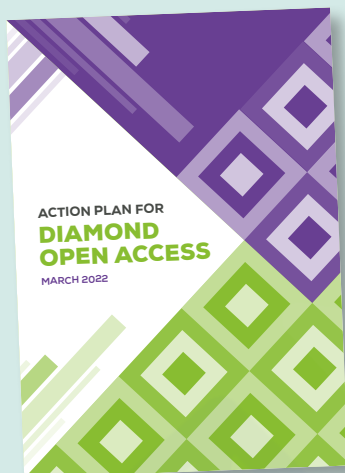


FIGURE 8 Plans to review strategic approaches to open science



EXAMPLE A Science Europe's support for Diamond Open Access



The discussion on the future of open scholarly publishing increasingly focuses on not-for-profit models and community ownership. Political support for and public sector engagement in such models have both grown in recent years, in response to inadequate commercial practices.

Science Europe and its members play a leading role in supporting 'diamond' open access (Diamond OA), in which research outputs are openly available without charging fees to either authors or readers. In this model, all content-related elements are led and owned by scholarly communities.

At the initiative of Science Europe, cOAlition S, OPERAS, and the French National Research Agency (ANR), a coalition of over 160 public sector organisations has endorsed the [Action Plan for Diamond Open Access](#), which was launched in March 2022. The Action Plan prioritises efficiency, quality standards, capacity building, and sustainability.

The Diamond OA community is taking shape through a series of events. A [first conference](#) in September 2022 in Zadar, Croatia served to discuss Diamond OA as a not-for-profit scholarly communication model. The [Global Summit on Diamond Open Access](#) in October 2023 in Toluca, México, emphasised the global outlook of the community, and focussed the discussion on the community-led and -owned nature of the model. The [2nd Global Summit on Diamond Open Access](#) will take place in December 2024 in Cape Town, South Africa and explore social justice as an element of the model.

The Diamond OA community is committed to collective action and is aligning globally. A Global Alliance for Diamond Open Access, facilitated by UNESCO, will be launched in 2025 to take forward the worldwide alignment of the community. At European level, the community's commitment to collective action will be taken forward with the launch of the European Diamond Capacity Hub in 2025. This organisation will support diamond communities in Europe, and serve as a regional hub within the forthcoming Global Alliance for Diamond Open Access.

2. Open Science in Research Assessment

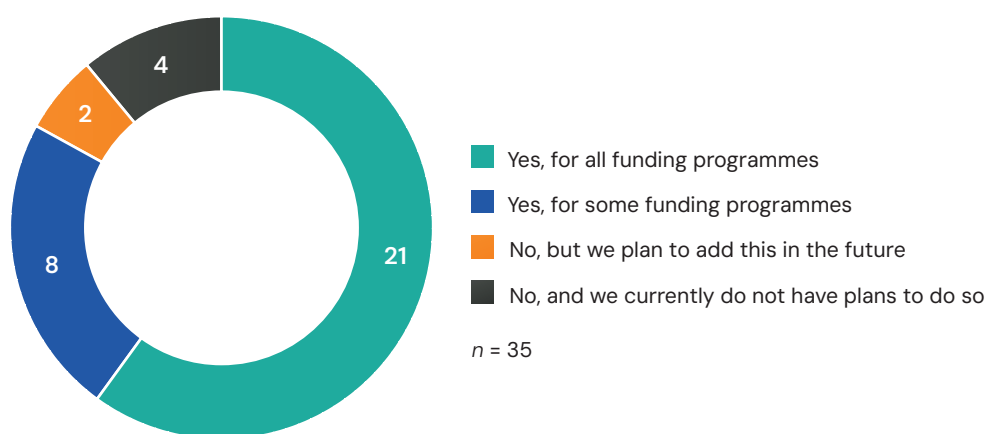
Open science is realised through the practical actions of individuals and organisations. These actions must be recognised, rewarded, and incentivised if they are deemed as valuable to research systems. For both research funding and performing organisations, recognition is most effectively actualised through assessment processes for funding allocation and career progression. This part of the survey focussed on the breadth and coverage of current and planned research assessment practices for open science, the extent to which individual element of open science are supported and assessed, as well as the direction of future changes.

2.1. Funding Requirements for Open Science

Research assessment practices for the allocation of funding determine what is considered important across all aspects of the research process. The criteria used, the questions asked, and the incentives and rewards given, all shape what is valued by research organisations. In this part of the survey, organisations that fund research were asked about their requirements towards open science from funded projects, how they collect information at application stage, and the types of support they provide to applicants. The results highlight that open science is included extensively as part of the requirements made of funded projects.

Over half of responding organisations include requirements on elements of open science universally across all their funding programmes, and a further quarter include such requirements in some of their funding programmes (see figure 9). Of the six responding organisations that do not include any form of open science requirements for funded projects, two plan to introduce them in the future. The remaining four responding organisations have no plans to introduce funding requirements for open science in the future, relying instead on recommendations, guidance, incentives, and other forms of support.

FIGURE 9 The inclusion of open science as part of funding requirements for funded projects?



EXAMPLE B Good practice: Research Council of Finland (AKA)



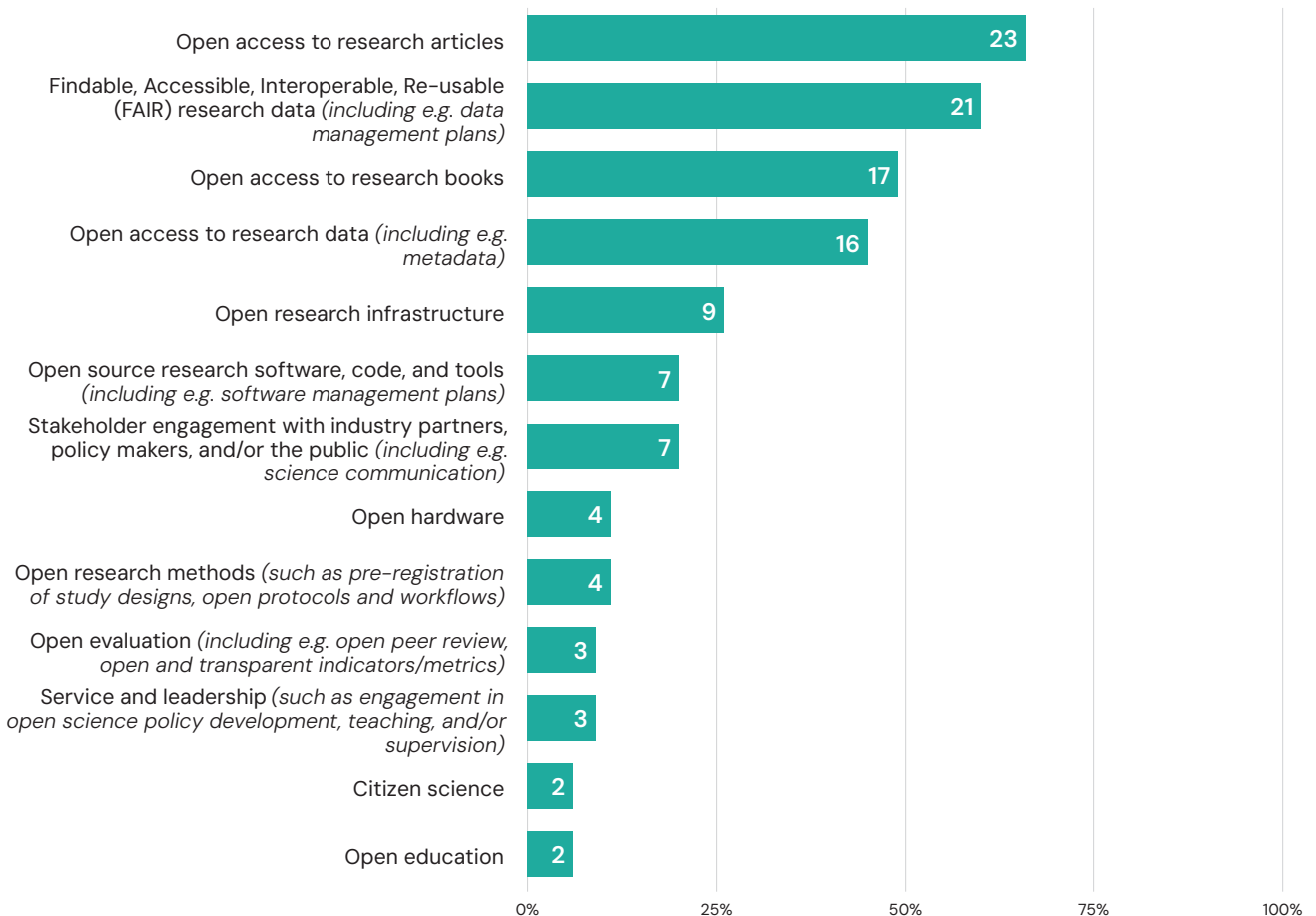
The **Research Council of Finland (AKA)** offers [clear guidance](#) on the elements of open science that should be considered and included as part of applications for its funding calls. These include guidelines on open access to scientific publications, data management and openness, and data management plans.

Details of how open science plans are taken into account as part of review and decision processes are provided. Information on the terms and conditions for the use of funding by granted projects (including for open science activities) and the types open science reporting undertaken for funded research are also provided.

Of the broad range of open science elements that could be required of funded research projects, only open access to research articles and FAIR data practices are currently required by more than 50% of responding organisations. Open access to research books is also a requirement made by nearly half of responding organisations. Other elements of open science are included in requirements by only few responding organ-

isations currently. A familiar pattern can be discerned when comparing the open science elements included as part of requirements for funded projects with those mentioned in strategic documents (see figure 3), highlighting a coherence between the strategic approaches to open science by organisations, and their practical implementation through assessment processes.

FIGURE 10 Elements of open science included as part of funding requirements for funded projects? (multiple choice)



n = 35

EXAMPLE C Good practice: UK Research and Innovation (UKRI)



**UK Research
and Innovation**

In 2022, UK Research and Innovation (UKRI) committed to [improving public involvement in health and social care research](#). This is an element of broad open science activities encompassed by 'stakeholder and public engagement in research'. For UKRI, this covers all the ways in which the research community works together with people, including: patients, carers, advocates, service users, and members of the community.

There are different approaches taken to the collection of information at application stage on open science elements (see figure 11). The survey results highlight that more traditionally considered aspects of open science are also those that provide the only examples where dedicated criteria are applied at application stage: these elements being open access to research articles, FAIR and open access research data, open access to research books, and stakeholder engagement activities. More commonly, information is collected through a dedicated question or section in application forms. Further, in line with the move towards more qualitative assessments of research proposals over the last decade (see DORA and CoARA), information is collected on a broader range of open science elements where it is included in narrative descriptions requested as part of application processes. The results

highlight varied approaches to the ways in which open science elements are considered as part of application processes. A clear contrast can be drawn between more active means of information collection (dedicated criteria or questions) applied to more traditional elements of open science, and more passive methods (recognised when included in narrative descriptions) applied to elements of open science beyond the traditional subset discussed above. What remains unclear from the results of this survey is whether there is any consensus on the direction of travel in these practices. The question arises whether research organisations are moving towards implementing dedicated criteria or dedicated questions for a greater range of open science elements, or whether these practices will be increasingly recognised, in a more flexible manner, when described in narrative sections within application processes?

EXAMPLE D Good practice: Foundation for Science and Technology (FCT)

The **Foundation for Science and Technology (FCT)** in Portugal requests and assesses information relating to FAIR data and data management activities during the application stage through a set of dedicated criteria.

To support this request, the FCT provides a template through [ARGOS](#), an open platform for data management planning, that is based upon the template of core requirements for data management plans published by Science Europe in a [practical guide](#) on internationally aligning research data management.



Fundação
para a Ciência
e a Tecnologia

Finally, the survey investigated the types of support provided by responding organisations to applicants. Some degree of support on how to include/describe open science activities is provided by the vast majority of responding organisations. Most commonly, guidance documents are made available to prospective applicants: nearly three-quarters of responding organisations provide guidance documents to applicants (see figure 12). Close to 50% of responding organisations offer staff support to applicants, for

instance in the form of a helpdesk or through the organisation of information sessions or webinars. The provision of tools and platforms and training sessions are other common forms of support provided. Covering costs of open science activities (such as publishing in open access journals, as an example) was mentioned as a form of support by several responding organisations as an additional comment despite not being listed as an option in the survey. It is noteworthy, here, that support for open access to publications may often be consid-

ered primarily from a cost-covering standpoint, as highlighted in a [survey report](#) by the European University Association. However, the results of this survey show that although cost covering

did arise as an unprompted response from a number of organisations, it is clear that support offerings and mechanisms are wide-ranging and very common.

FIGURE 11 The ways in which information is collected at application stage on the funding requirements made for open science

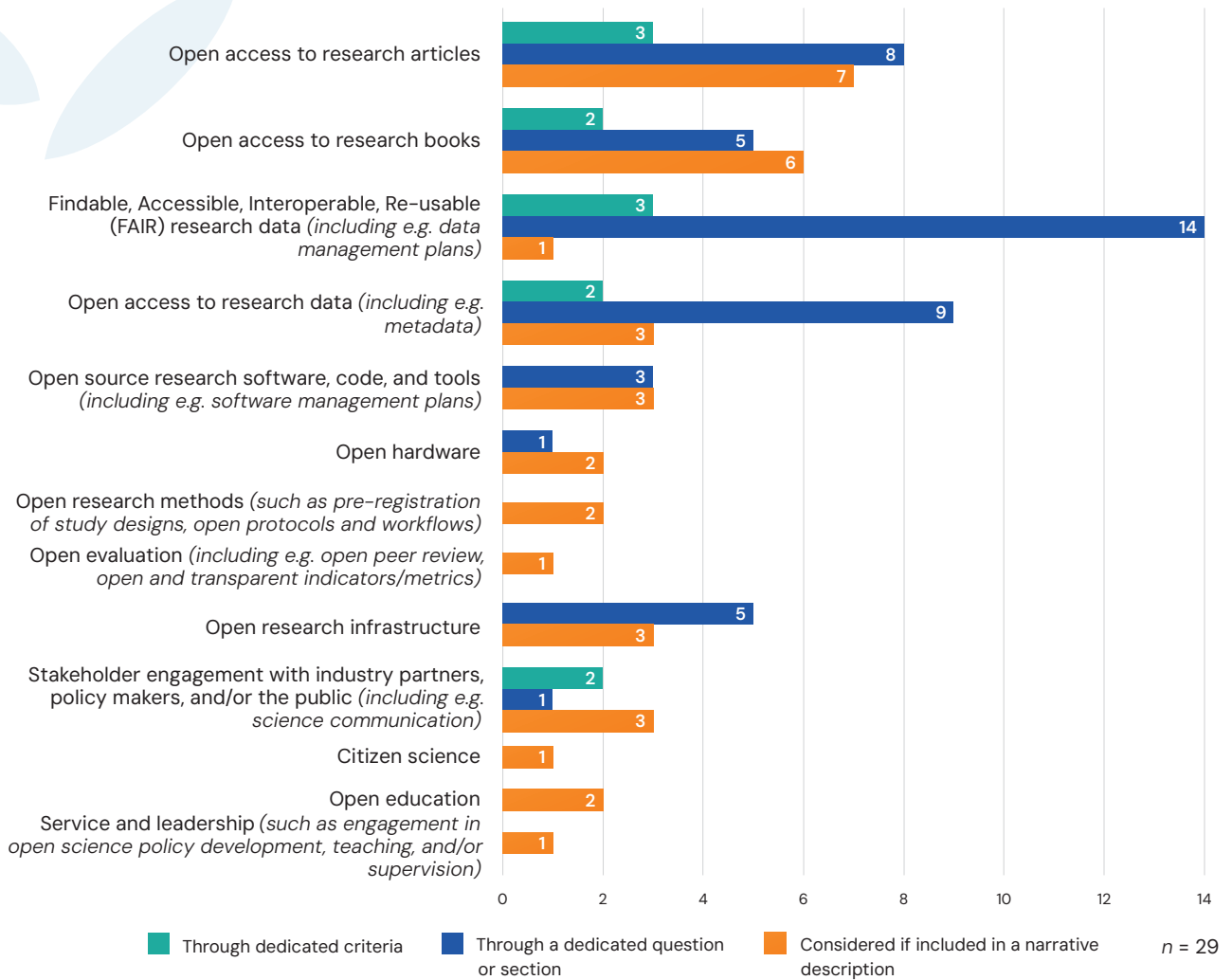
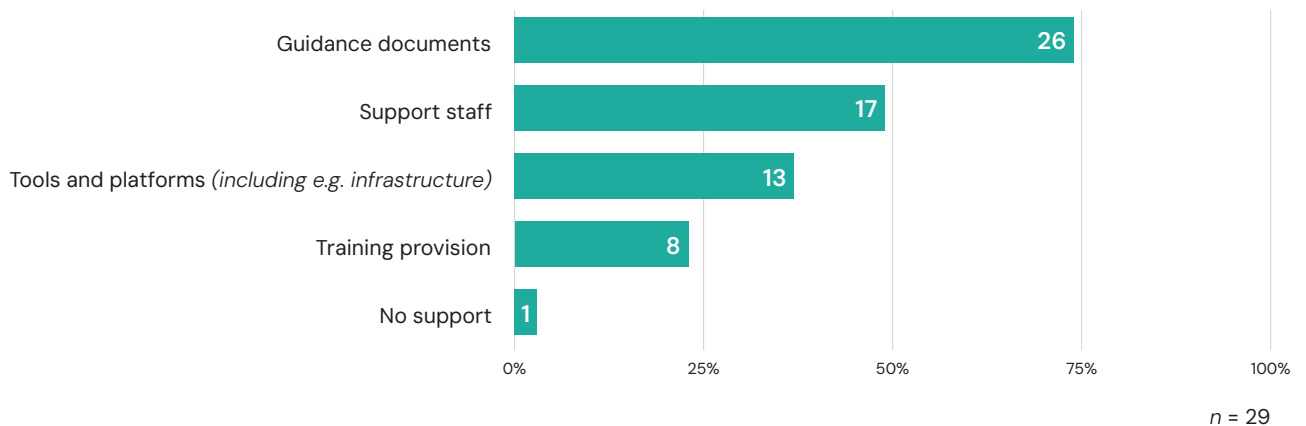


FIGURE 12 The ways in which support is provided to applicants in relation to the funding requirements made for open science (multiple choice)



EXAMPLE E Good practice: Luxembourg National Research Fund (FNR) and German Research Foundation (DFG)



The Luxembourg National Research Fund (FNR) offers an annual workshop to prospective applicants, introducing the [Narrative CV approach to assessments](#), providing insights in how the format is used and evaluated, and answering common questions such as how to describe and evidence relevant activities.



The German Research Foundation (DFG) supports open access in infrastructure funding through the [“Open Access Publication Funding” programme](#), with the long-term aim of contributing funds exclusively towards subsidising open access publications resulting from projects funded by the DFG.

The results of this section highlight the depth and breadth to which open science is incorporated in assessment processes by research funding organisations, and the varied approaches taken to the collection of information at application stage as well as the support provided to applicants. A clear

link can be established between the elements of open science mentioned in strategic documents and their targeting as part of assessment processes, showing a level of coherence between organisational strategies, policies, and practices.

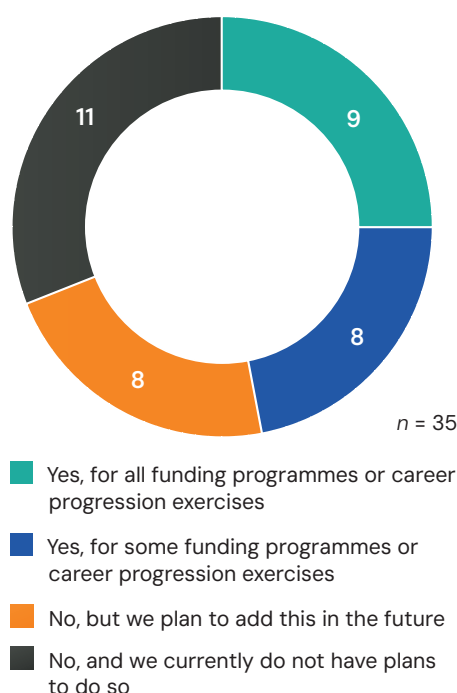
2.2. Researcher Recognition for Open Science

An important aspect of all assessment processes is an evaluation of the applicants’ track record, and open science activities can be rewarded as part of these track record assessments. In this part of the survey, both organisations that fund and perform research were asked about the open science elements considered during the assessment of researchers. For research funding organisations, this refers to the assessment of a researcher’s track record at project application stage. For research performing organisations, this refers to the assessment of researcher’s track record during recruitment or promotion processes.

projects (see Section 2.1), and may be the result of the different type of assessments taking place: *ex ante* for the assessment of research projects, and *ex post* for the assessment of a researcher’s track record.

The results show that there is a diversity of approaches to the consideration of open science during the assessment of a researcher’s track record. A quarter of responding organisations report including assessments of open science elements across all funding programmes or career progression exercises. Around a quarter of responding organisations implement assessments of open science elements across some of their funding programmes or career progression exercises. About half of responding organisations do not currently include open science in their assessments of a researcher’s track record. Of these, 42% have plans to add this in the future, and 58% do not (see figure 13). This result contrasts with the extensive inclusion of open science elements in funding requirements for research

FIGURE 13 The inclusion of open science as part of the track-record assessments of researchers



EXAMPLE F Good practice: Dutch Research Council (NWO)

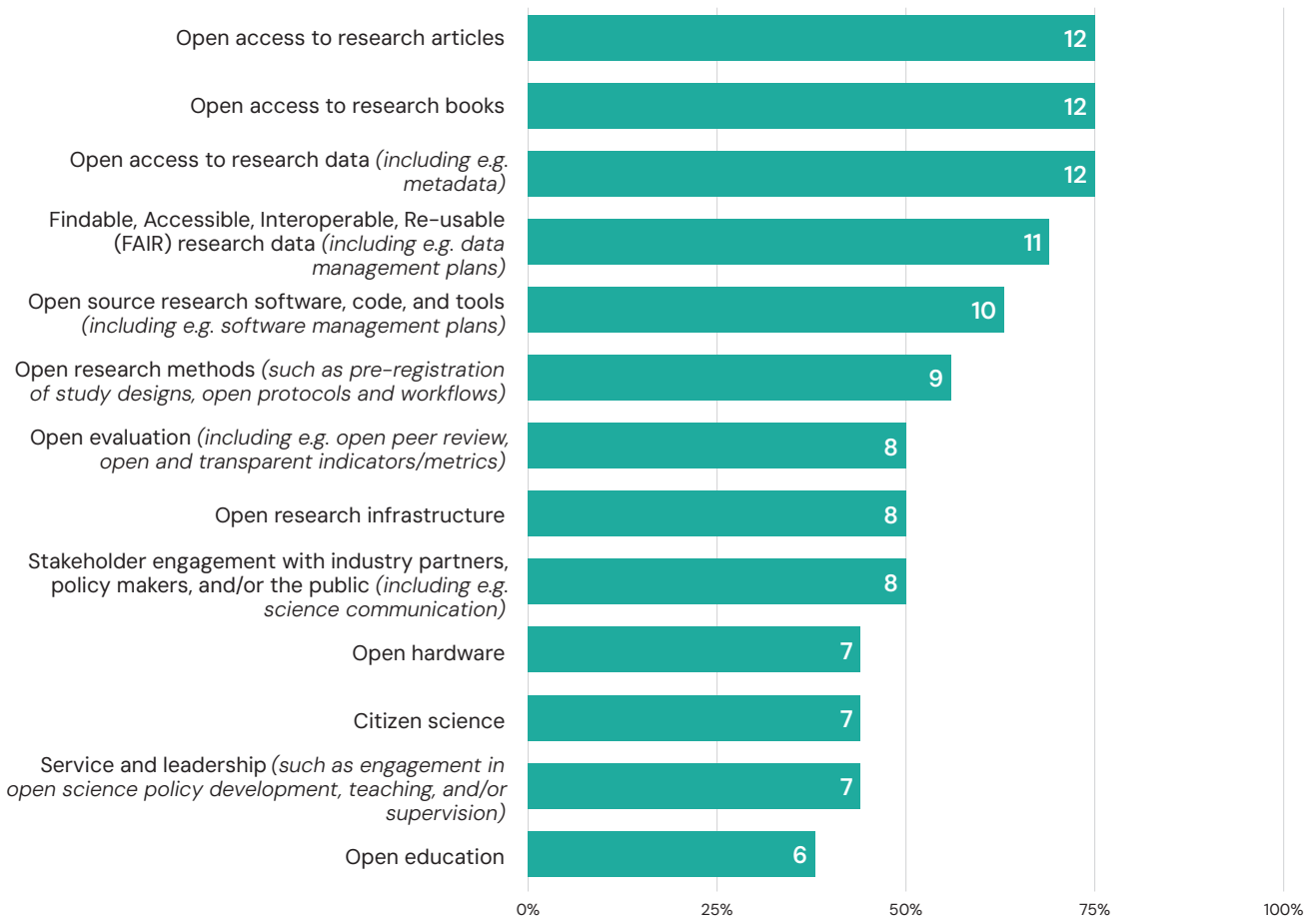


The **Dutch Research Council (NWO)** specifically recognises open science activities as part assessments for two funding programmes: the Open Science Fund and the Talent Programme. In the [Open Science Fund](#), the open science track record (in narrative form) of the lead applicant is part of the evaluation. The [Talent Programme](#) requires an evidence-based CV. In the evidence-based CV, applicants may refer to open science contributions and are asked if their listed outputs are open (through an open access repository).

Many elements of open science are recognised when included as part of descriptions of a researchers’ track record. Similar to previous results (see Section 2.1), the most widely recognised are: open access to research articles and books, and FAIR and open research data, with 75% of responding organisations who include open science in their track record assessments recognising these elements. All other listed elements of open science are recognised by at least a quarter of responding organisations, with examples such

as open methods and open software being recognised by more than half of respondents (see figure 14), more pronounced than in Section 2.1, by comparison. Although, the familiar pattern can still be resolved, the less traditional elements of open science are recognised more broadly and by a higher proportion of responding organisations. There are several possible reasons for this that warrant further investigation: the flexibility in reporting provided for by narrative CVs being one such example.

FIGURE 14 Elements of open science recognised as part of the track record assessment of researchers (multiple choice)

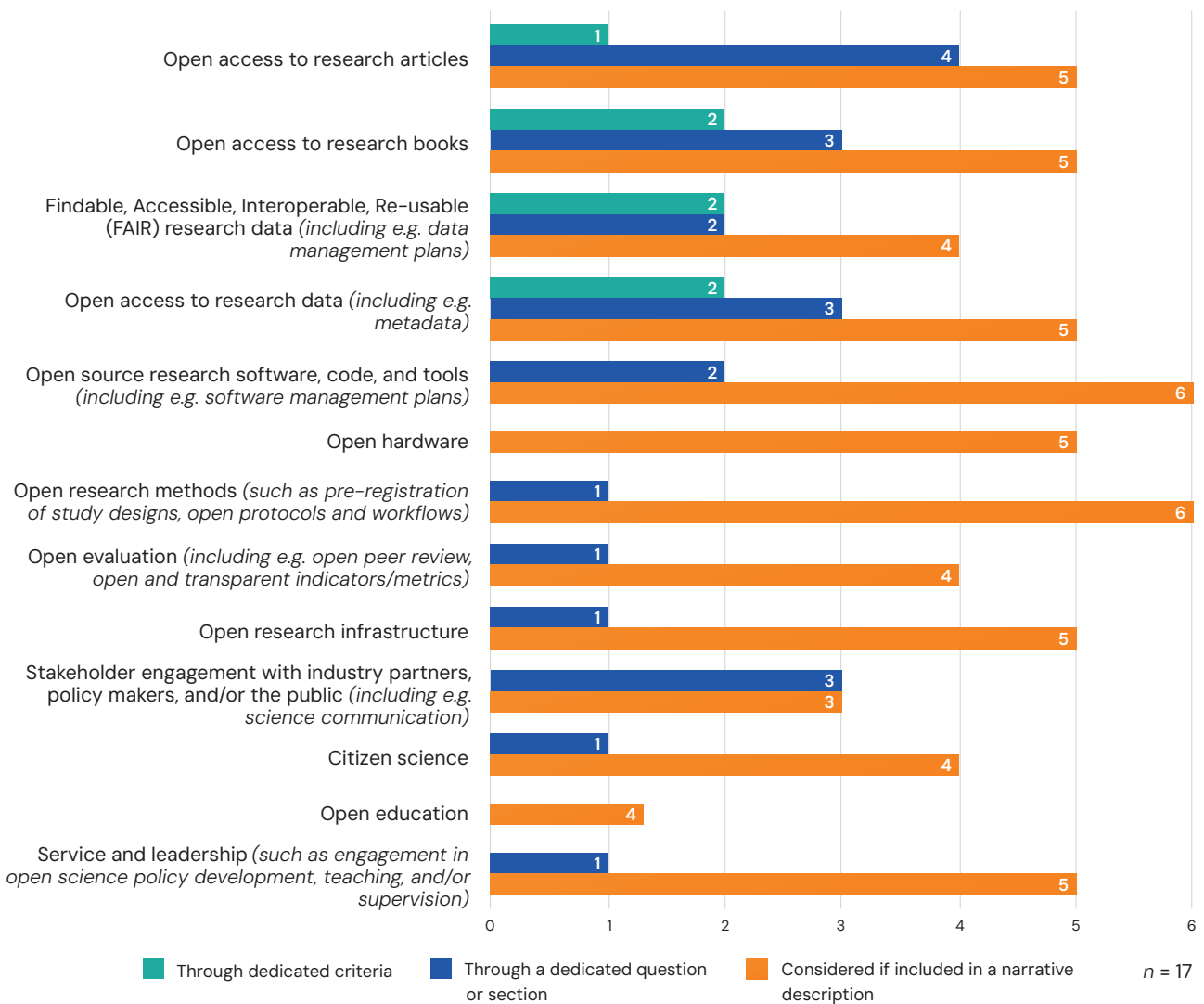


n = 16

Again, a variety of approaches are taken to the collection of information on open science elements in track record assessments, with an observable contrast between more active and passive collection measures. Most prevalent across all categories is “consideration if included in a narrative description”. Numerous examples are provided of dedicated questions or sections for gathering information on specific elements of

open science, or open science activities in general. Further, and similar to the results in Section 2.1, dedicated criteria are employed by only a few responding organisations, and in all cases these examples are restricted to the more traditional elements of open science: open access to research articles and books, and FAIR / open research data activities (see figure 15).

FIGURE 15 The ways in which information on open science activities is collected at application stage for researcher track record assessments



EXAMPLE G Good practice: Research Foundation Flanders (FWO)

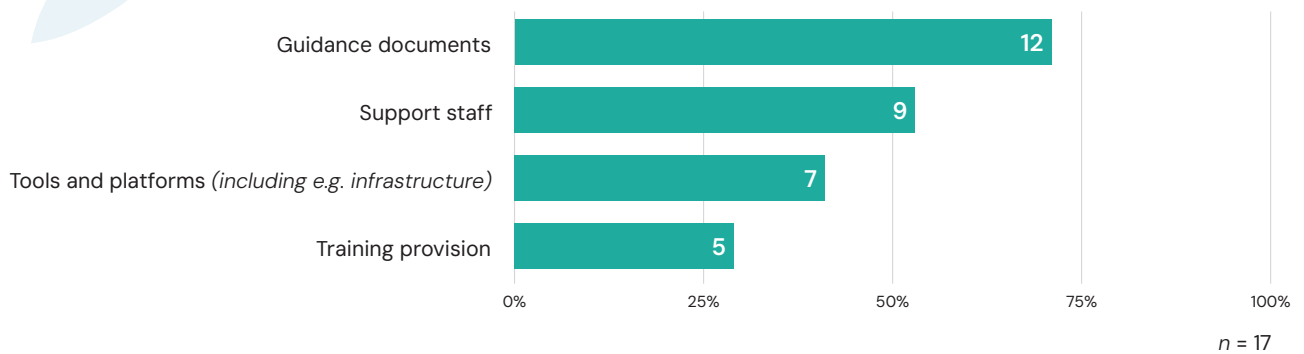


As part of the standard assessment processes of the **Research Foundation Flanders (FWO)**, any element of open science can be considered if mentioned in a narrative description or listed as a research output. In [application forms](#), there are five questions dedicated to research data management. Further, in most programmes, stakeholder engagement is encouraged through specific questions about working with societal actors and science communication activities.

All responding organisations provide at least one type of support to applicants in their reporting of open science activities as part of application processes. Guidance documents are the most common form of support, followed by the provision of dedicated support staff. Both types of support are implemented by over 50% of responding organisations. Tools and training are

provided as support mechanisms by another 40% of responding organisations (see figure 16). The prevalence of similar types of support is observed when comparing the results in this section to those relating to open science funding requirements, potentially highlighting the general applicability of support mechanisms.

FIGURE 16 The ways in which support is provided to applicants in relation to the funding requirements made for open science (multiple choice)



EXAMPLE H Good practice: Swiss National Science Foundation (SNSF)



The **Swiss National Science Foundation (SNSF)** provides a page on its website providing concise information for prospective applicants on the [narrative CV approach](#) to researcher assessment. This includes a sample CV and links to previously organised information webinars.

For both the requirements made towards funded projects and the assessments of research track records, policies and practices continually evolve. Over two thirds of responding organisations plan to review and update their policies and practices on the open science requirements made towards

funded projects, and almost all responding organisations plan to review their approaches to the recognition of open science as part of research track record assessments. CoARA is often cited as a driver for these reviews and updates.

3. Monitoring of, and Evidence Gathering for, Open Science

Member organisations were asked about the open science monitoring mechanisms they have in place, as well as the evidence base they collect and use to justify their strategic approaches to open science. For the purposes of this survey report, monitoring is understood as information gathering related to open science processes, and

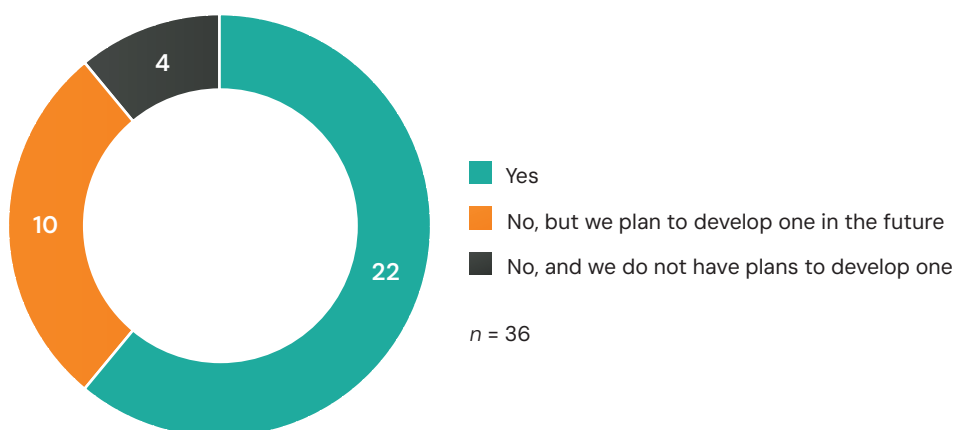
policies of research organisations. Evidence gathering refers to a broader set of activities that aim towards a better understanding of the effectiveness of open science and its elements, as well as their impacts and implications for research culture.

3.1. Open Science Monitoring

Participants were asked whether they have open science monitoring mechanisms in place for research outputs emanating from their funding and/or research outputs produced by affiliated

researchers. The response indicates that a large majority either currently have such mechanisms in place or have plans to develop them in the future (see figure 17).

FIGURE 17 Open science monitoring mechanism in place



A closer look at the elements of open science monitored by responding members reveals a familiar pattern. Open access to research publications and (FAIR) research data are monitored by the majority of responding organisations with a monitoring mechanism in place, with research articles being tracked almost universally (see figure 18). Other elements are much less frequently monitored. This pattern mirrors, and is even more pronounced than, the one observed in the inclusion of open science elements in the strategic approaches of responding members (see figure 3).

When asked about the purposes of the monitoring information, the result shows that responding members use this information for a variety of purposes (see figure 19). A large majority of responding organisations with monitoring mechanisms in place use the data to investigate changes over time, guide policy development, assess compliance, make evaluations, and implement supporting measures. Notably, these uses are primarily internal. In contrast, outward-facing purposes, such as negotiations with publishers and communication with external partners, are far less common.

FIGURE 18 Open science elements included in monitoring mechanisms (multiple choice)

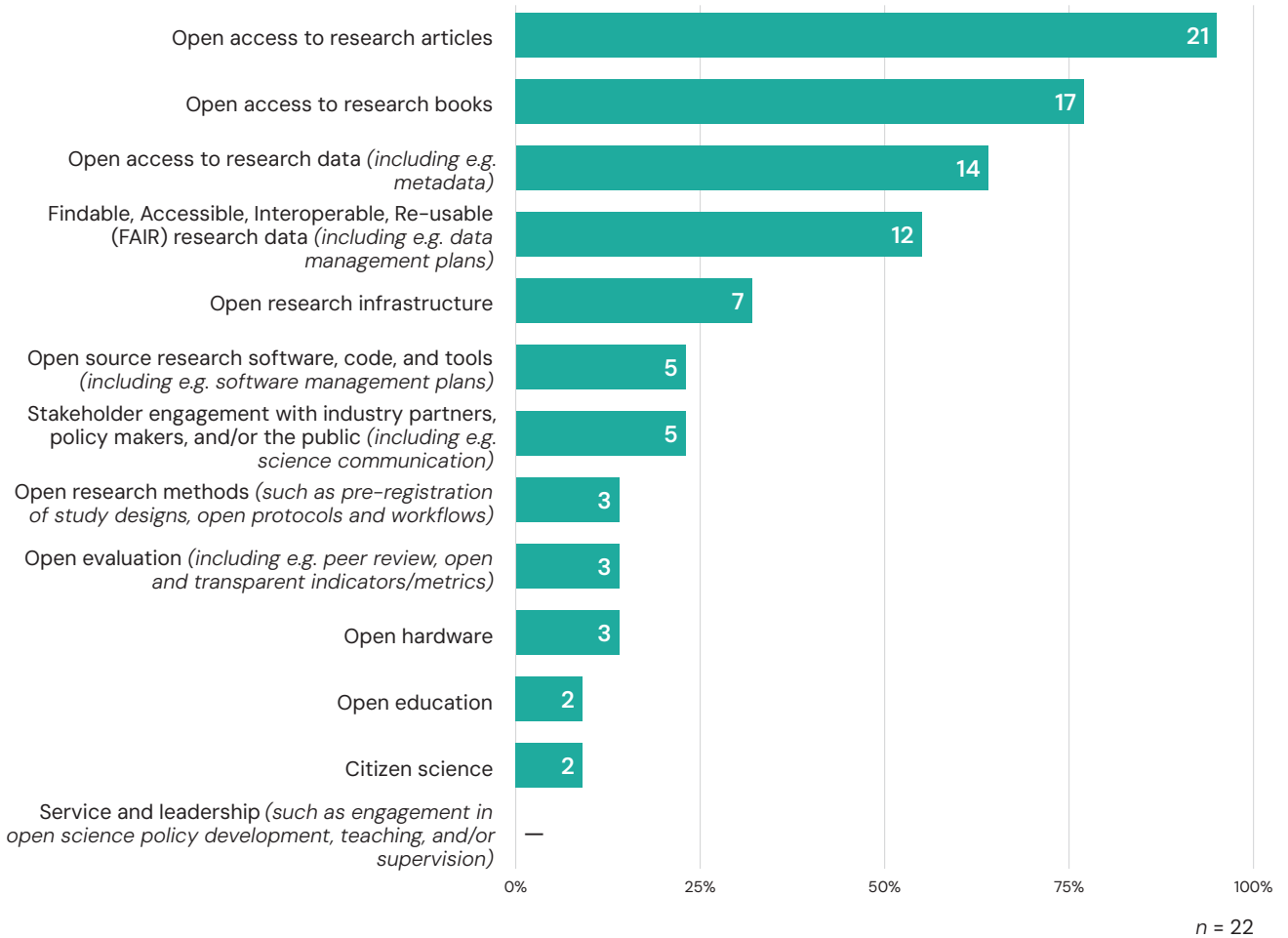
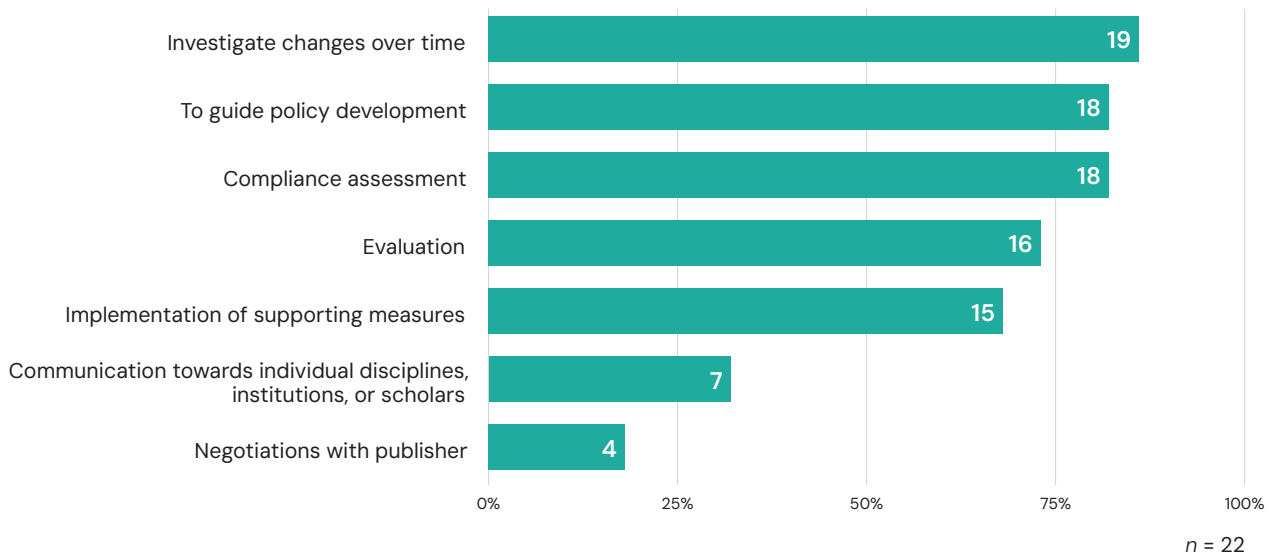


FIGURE 19 Purposes of information gathered through monitoring mechanisms (multiple choice)

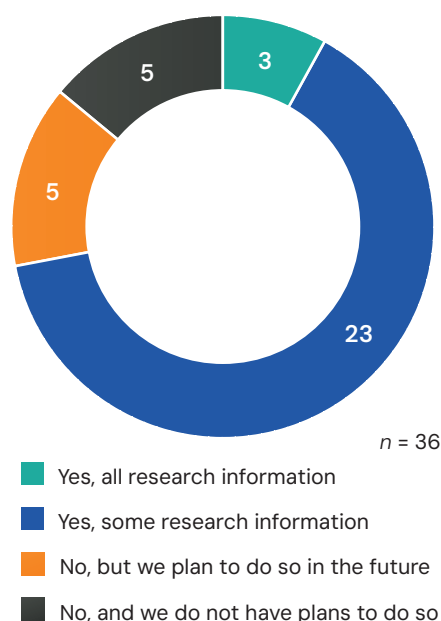


Additional comments from responding members provide further insights into their monitoring practices. These remarks highlight the various research information systems and services employed to collect and interpret monitoring data. Although some commercial platforms are mentioned, it is significant that most responding organisations rely on public systems, which are often specific to their institutions (for research performing organisations), regions, or countries. The comments also underscore the predominant focus on open access research publications and (FAIR) research data that we saw previously (see figure 18), as well as the collaborative nature of these monitoring practices. Researchers, universities, and research libraries are frequently mentioned as key partners in data collection. Notably absent from the comments are efforts that aim to collect internationally comparable information.

Participants were asked if their organisation makes openly available the research information they produce. This question was inspired by the [Barcelona Declaration on Open Research Information](#), launched in April 2024, which contains commitments in support of open 'research information': information (sometimes referred to as metadata) relating to the conduct and communication of research. While these commitments cover both information used and produced by research organisations, this question

focused specifically on the information produced by the organisations themselves. The response indicates that a majority of responding members openly share some of the research information they produce, although only a minority does this for all research information (see figure 20). Further research is needed to determine the extent of information sharing and to identify the main challenges in expanding this practice in the future.

FIGURE 20 Open availability of research information



3.2. Evidence Gathering for Open Science

Member organisations were asked to what extent they commission, fund, or perform evidence-gathering activities related to open science. Their response indicates that such activities are less commonly undertaken (see figure 21). While about a third of the responding organisations says they perform evidence-gathering activities, it is rare for them to commission or fund these types of activities. Moreover, a quarter of respondents indicate that they neither participate in evidence-gathering activities, nor plan to do so in the future.

Among the responding members that do commission, fund, or perform evidence-gathering activities, a large majority indicate that the resulting material is used for evidence-gathering purposes and to guide policy development (see figure 22). Additionally, close to two-thirds of these responding members use the material to implement supporting measures, such as research assessment reform.

Additional comments from responding members provide more information on their evidence-gathering activities. These comments show that evidence collection is conducted both internally and in partnership with external entities. Internally, this involves either project-based initiatives or, in some instances, dedicated research on research units. Externally, collaborations are primarily with public institutions such as ministries, libraries, and national consortia, with occasional mentions of commercial partners. Notably absent from the comments are international organisations engaged in evidence gathering, with only one member making mention of this. Considering the involvement of members in organisations like CoARA, cOAlition S, and Science Europe itself, this absence could point to a lack of understanding of what is included under evidence-gathering activities.

FIGURE 21 Commissioning, funding, and/or performing evidence-gathering activities related to open science (multiple choice)

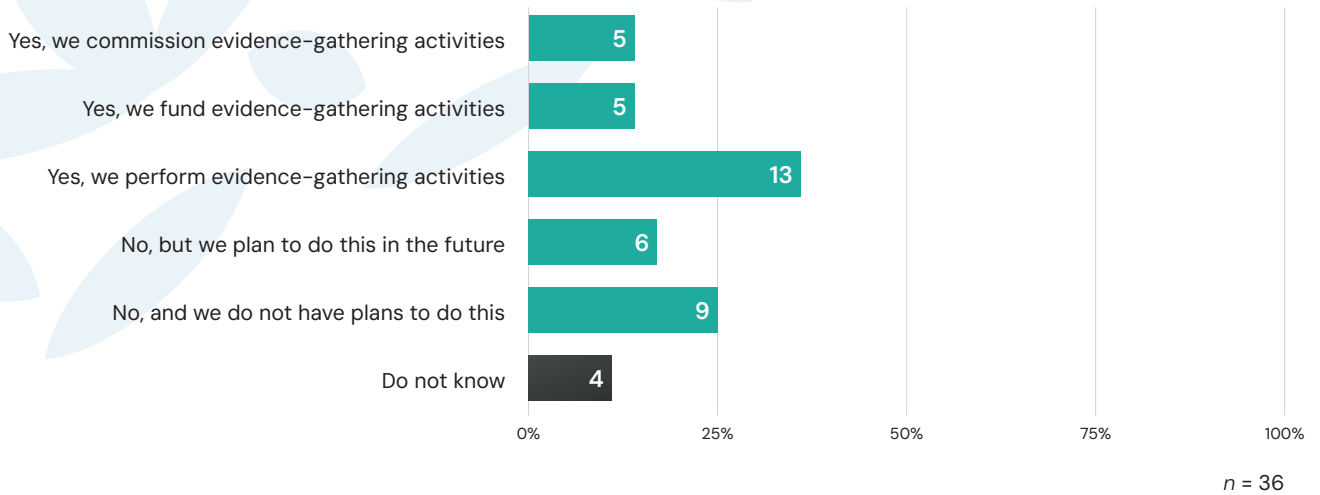
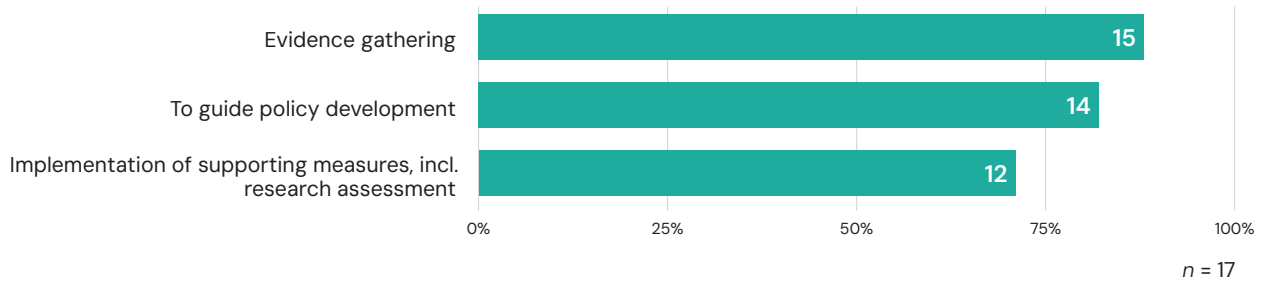


FIGURE 22 Purposes of evidence-gathering activities related to open science (multiple choice)



Conclusion

This survey report offers a descriptive analysis of the role that public research funding and performing organisations in Europe play in the shifting landscape of open science and research assessment reform. As these issues gain increasing attention from both the research community and policy makers alike, the findings demonstrate how Science Europe members are actively shaping and contributing to these developments. The following is a summary of the survey results and an outline of the role that Science Europe and its members will continue to play in supporting future progress.

The Survey Results

The survey results show that open science is a key strategic priority for responding members. Nearly all members have adopted a documented strategic approach to open science. Most of these strategies are implemented at the organisational level, often within a robust policy framework that extends across organisational, regional, national, and international levels. Additionally, responding members are continuously reviewing their strategies to ensure they remain relevant and aligned with the evolving open science landscape.

The strategic approaches encompass a broad range of open science policies and practices. While the survey results highlight a near universal emphasis on open access to research publications and (FAIR) data, they also reveal that responding members are incorporating a broader range of open science elements into their strategies, including open infrastructures, stakeholder engagement, open source research software, and citizen science. A small group of responding members are expanding their approaches even further with the inclusion of open evaluation, open research methods, service and leadership, open hardware, and open education. This key finding establishes a consistent pattern seen throughout the survey results related to the assessment, monitoring, and evidence gathering for open science.

Open science is viewed as a contributing factor in shaping research cultures, enhancing research quality, and increasing the societal impact of research. The survey results highlight a strong link between open science and the mission of responding members to support high-quality research that benefits humanity. Although connections to other values and a broad range of multifaceted goals are recognised, open science is most strongly associated with improving the quality and impact of research.

The development and implementation of open science policies and practices by responding research funding and performing organisations are shaped by a range of drivers and challenges. Responding members highlight their mandate in shaping strategic approaches to open science, often working in close alignment with national and international partners. In reviewing these strategies, they include both a reflection on traditional aspects such as open access, and an exploration of new and emerging elements. However, financial constraints and concerns about the impact on researchers and their careers stand out as the most significant, though not the only, challenges they face.

On the practical implementation of open science as part of research assessment processes, the survey results clearly demonstrate that open science is deeply and widely incorporated across all aspects of assessment processes by both responding research funding and performing organisations. Taking a closer look at different aspects of assessment processes reveals a variety of approaches to aspects such as information collection mechanisms and support provision. There are also several key areas where there is a distinct split in the approaches taken by responding members, namely the inclusion of open science as part of track record assessments of researchers.

On the open science funding requirements made at application stage, traditional elements of open science predominate, and the re-occurring pattern prevails, with only a few examples of responding organisations including a broader array of open science elements into their funding requirements. Again, dedicated criteria or questions are incorporated into application forms only for the more traditional subset of open science elements. Narrative descriptions within research proposals open opportunities for the consideration of a

wider range of possible open science activities, and the survey results indicate this already enables some organisations to collect information on a wide range of open science elements. Support to applicants is provided almost universally, most commonly in the form of guidance documents.

For the assessment of researcher track records, there is a clear split between responding organisations that do incorporate open science into these types of assessments and those that do not. Whether this reflects a deliberate action or simply differences in practice maturity levels warrants further exploration, especially noting the difficulties in addressing track record assessments of researchers from backgrounds or regions of greatly different research resources and infrastructure. Of the responding organisations that do already incorporate open science into track record assessments, a wide variety of open science elements are recognised by a high proportion of responding members. Narrative CV approaches can be seen to play an important role in allowing for this recognition of a wide range of open science elements, yet there are numerous examples of dedicated questions, sections or criteria being employed to gather information on open science activities. This poses the question of whether organisations are moving towards a more passive approach to information collection, or a more active one, and these approaches should be balanced to allow for effective information gathering whilst ensuring that applicants, reviewers, and administrators are not overburdened by application and assessment processes. Support for applicants is provided by all responding organisations that include open science in their assessments in various forms, most commonly through guidance documents and support platforms.

The assessment of open science is an evolving topic and the majority of responding organisations plan to review and update their policies and practices in the coming years. Recent re-

ported advances show that these changes are part of continual or periodical processes and are influenced by international initiatives such as CoARA. The shifting landscape from traditional scholarly publishing to open scholarly communication clearly permeates through the assessment processes of the majority of responding organisations, but there are still noticeable differences in the approaches taken on specific aspects, for instance the inclusion of a broader set of open science elements in track record assessments in comparison to funding requirements – a pattern that may reflect fundamental differences in approaches for *ex ante* versus *ex post* evaluation.

The survey results indicate that a significant majority of responding members either have open science monitoring mechanisms in place or plan to develop them in the future, though evidence-gathering activities are less common. When looking at what is being monitored, we encounter the familiar pattern that focuses primarily on tracking open access to research publications and (FAIR) data, while other aspects of open science receive far less attention.

As open science policies and practices become more widespread and ambitious, expanding monitoring mechanisms and evidence-gathering activities will become an area for further exploration. The survey results highlight specific elements to look into. Firstly, extending monitoring beyond traditional elements like open access to research publications and (FAIR) data. Secondly, making research information openly available. And thirdly, making research information internationally comparable by developing shared methodologies and concepts. Currently, monitoring and evidence-gathering efforts are largely confined to the organisational and national levels, leaving the international dimension underexplored. Two initiatives working to change this are the [Open Science Monitoring Initiative](#) and the [Global Research Initiative on Open Science](#).

The Way Forward

Science Europe and its members advocate open science as an [integral component](#) of a well-functioning research system, and as a [key contributor](#) to the evolution of research cultures. [Research assessment reform](#) is key to both these ambitions. These strategic goals are central to our shared

responsibility in shaping the future of research in Europe and beyond. Looking ahead, the survey results will play an important role in driving discussions among the members and reinforcing our organisations' positions in policy debates.

Mutual Learning and Alignment

Science Europe members will engage in a series of workshops to delve deeper into the survey results. While the survey provides a descriptive analysis of their open science strategies, these workshops will allow for a more detailed interpretation of the results, as well as a discussion on the potential and preferred directions forward. These discussions will enhance mutual learning and policy alignment among members, addressing both well-established topics of common interest and emerging issues that are expected to gain importance in the future. The efforts will be guided by the [Working Group on Open Science](#), the [Working Group on Research Culture](#), and their associated task forces.

Simultaneously, Science Europe is launching a tender for information to further develop the survey findings. This tender aims to expand and contextualise the results by scoping the broader academic research landscape and linking it to the survey outcomes. The ultimate goal of this initiative, including the survey report, member workshops, and tender for information, is to formulate strategic recommendations on how research funding and performing organisations can advance open science.

The survey results also provide opportunities for mutual learning and alignment between Europe and other global regions. For example, comparing the open science values and goals of European research organisations with those of their counterparts worldwide could result in insightful findings. Would there be a shared emphasis on research quality and impact, or might there be a broader focus on open science's role in promoting equality, diversity, inclusion, and belonging? Science Europe aims to contribute to the global conversation by sharing the survey questions (see Annex), and will present these results to its international partners through platforms like the [Global Research Council](#).

Contribution to Policy Advancements

The survey results highlight the contribution of open science and research assessment reform to research and innovation policy. Responding members see a strong connection with research quality and impact, and to a lesser extent with equality, diversity, inclusion, and belonging in research. This is important to recognise. Despite strong political support from EU institutions and national governments (see Introduction), the value of open science and research assessment reform for advancing research and innovation policy is not always fully acknowledged or even understood.

The recent debate on research with potential 'dual-use' for civilian and military applications provides a good example. The goal of open science to make research "as open as possible, as closed as necessary" greatly enriches this discussion. It moves the debate beyond a false dichotomy between open and closed research, and instead asks to consider the appropriate balance between openness and restrictions in research. Other relevant policy discussions include the regulation of artificial intelligence in academic research and previous EU legislative actions on copyright, digital services, and other issues that affect research.

The survey results will help to inform policy and practice changes by Science Europe member organisations as part of their strategies and positions towards open science and research assessment reform. Science Europe, for its part, will use the survey findings to strengthen the impact of open science and research assessment reform in research and innovation policy. The results will be promoted in policy organisations, including CoARA, the European Research Area, and the Global Research Council. They will also be used during policy events in the coming months and years.

Annex

Survey on Approaches to, and Research Assessment of, Open Science

Introduction

Science Europe is organising a membership survey on the strategic approaches to, and implementation of open science by its Member Organisations. This initiative will provide a clear and comprehensive insight into the strategies and policies for open science, as well as research assessment, monitoring, and evidence gathering of open science. The results will be invaluable for public research funding and performing organisations in Europe and beyond, while also highlighting to other actors their role in fostering an open research culture.

The results of the survey will be invaluable to public research funding and performing organisations, who can use it as a tool to share experiences, compare practices internationally, and further refine their individual and collective approaches. They will also offer unique information for discussions at the policy level in Europe (and beyond), notably in CoARA and the research culture and Open Science communities. Finally, they will also highlight to other actors their role in fostering an open research culture.

Open science (also referred to as open research) is defined as the comprehensive ambition to make research knowledge openly available, accessible, and reusable for everyone. For the purposes of this survey, this means that open science includes, but is not limited to a wide range of policies and research practices like open access to research outputs (publications, data, software, ...), open research methods, open evaluation, engagement with society, citizen science, open education, and so on.

The survey questions are designed to be relevant to both research funding and performing member organisations of Science Europe, splitting where necessary the survey according to organisation type.

General Information

- * Your name
- * First name
- * Last name
- * What is your job title?
- * What is your email address?
- * Which Science Europe Member Organisation do you represent?
- * Which of the following best describes your organisation?
 - A research funding organisation (RFO)
 - A research performing organisation (RPO)
 - A research funding and performing organisation (RFO+RPO)

Strategic Approaches to Open Science

How is open science approached strategically by your organisation? This first part of the survey asks about documented strategic approaches on open science (or any of its elements) and explores the underlying values, goals, drivers, and challenges of those approaches.

- * **Does your organisation follow a documented strategic approach on open science or any of its elements?**

In the next question you will be able to further specify the elements of open science that are included in this approach.

- Yes, open science is part of my organisation's mission, strategy, or vision documents
- Yes, my organisation has an open science policy (or policies on one or more elements of open science)
- Yes, my organisation follows a national or regional open science policy (or policies on one or more elements of open science)
- Yes, my organisation follows an international policy
- No, but we plan to in the future
- No, and we currently do not have plans to
- Other: _____

- * **[IF RELEVANT]** You indicated that open science is part of your organisation's mission, strategy or vision documents. Please provide any clarifications, additional comments, or links to relevant documents related to this answer.

- * **[IF RELEVANT]** You indicated that your organisation has one or more policies on open science. Please provide any clarifications, additional comments, or links to relevant documents related to this answer.

- * **[IF RELEVANT]** You indicated that your organisation follows a national or regional policy on open science. Please provide any clarifications, additional comments, or links to relevant documents related to this answer.

- * **[IF RELEVANT]** You indicated that your organisation follows an international policy on open science. Please provide any clarifications, additional comments, or links to relevant documents related to this answer.

- * **[IF RELEVANT]** Which elements of open science are part of the documented strategic approach followed by your organisation?

- Open access to research articles
- Open access to research books
- Findable, Accessible, Interoperable, Re-usable (FAIR) research data (including for example data management plans)
- Open access to research data (including for example metadata)
- Open source research software, code, and tools (including for example software management plans)
- Open hardware
- Open research methods (such as pre-registration of study designs, open protocols and workflows)

- Open evaluation (including for example open peer review, open and transparent indicators/metrics)
- Open research infrastructure
- Stakeholder engagement with industry partners, policy makers, and/or the public (including for example science communication)
- Citizen science
- Open education
- Service and leadership (such as engagement in open science policy development, teaching, and/or supervision)
- None of the above
- Other: _____

* **[IF RELEVANT]** According to its documented strategic approach, does your organisation express Open Science to be beneficial for the following values?

The values below are based on and defined in the UNESCO Recommendation on Open Science.

- Quality and Integrity
- Collective benefit
- Equity and fairness
- Diversity and inclusiveness
- My organisation does not express this
- I do not know
- Other: _____

* **[IF RELEVANT]** According to its documented strategic approach, does your organisation pursue the following goals with Open Science?

The goals below are based on the guiding principles defined in the UNESCO Recommendation on Open Science.

- Transparency, scrutiny, critique, and reproducibility
- Equality of opportunities
- Responsibility, respect, and accountability
- Collaboration, participation, and inclusion
- Flexibility
- Sustainability
- My organisation does not express this
- I do not know
- Other: _____

* **[IF RELEVANT]** What and/or who are the primary drivers for your organisation's strategic approach to open science?

- Your own organisation
- Your national ministry/national policy or policies
- The research community
- International organisations (including for examples UN agencies, EU institutions)
- Good practices and guidance by other organisations in your country
- Good practices and guidance by organisations in other countries
- Requirements by funding bodies or other organisations in your country
- Other: _____

* **[IF RELEVANT]** Does your organisation have plans to review its strategic approach to Open Science in the future?

- Yes
- No
- I do not know

* **[IF RELEVANT]** Please provide any further information on your organisation's plans to review its strategic approach to Open Science in the future.

* **What are the main challenges your organisation faces when developing a strategic approach to Open Science?**

This question refers specifically to challenges to developing a strategic approach. The next question will go into challenges when implementing such an approach.

- Concerns over impact on research and its outputs
- Concerns over impact on researchers and their careers
- Legal concerns
- Financial concerns
- Technical complexity
- Monitoring
- Lack of capacity in the organisation
- Lack of co-ordination and/or alignment within the national system
- Lack of co-ordination and/or alignment within the international system
- Lack of awareness and/or knowledge among staff members
- Lack of awareness and/or knowledge among the research community
- Resistance from ministry
- Resistance from within the organisation
- Resistance from the research community
- Other: _____
- None of the above

* **[IF RELEVANT]** What are the main challenges your organisation faces when implementing its strategic approach to Open Science?

This question refers specifically to challenges to implementation, whereas the previous question referred to challenges in developing a strategic approach.

- Concerns over impact on research and its outputs
- Concerns over impact on researchers and their careers
- Legal concerns
- Financial concerns
- Technical complexity
- Monitoring
- Lack of capacity in the organisation
- Lack of co-ordination and/or alignment within the national system
- Lack of co-ordination and/or alignment within the international system
- Lack of awareness and/or knowledge among staff members
- Lack of awareness and/or knowledge among the research community
- Resistance from ministry
- Resistance from within the organisation
- Resistance from the research community
- Other: _____
- None of the above

Open Science in Research Assessment: Funding Requirements (only for RFOs)

How is open science included in the assessment of research and/or researchers by your organisation? This part of the survey looks at the breadth and coverage of current and planned research assessment practices for open science, the extent to which individual elements of open science are supported and assessed, as well as the direction of travel for future changes.

Funding requirements for open science

In this part of the survey, Research Funding Organisations (and organisations that act as both an RFO and Research Performing Organisation) will be asked two sets of similar questions relating to two different elements of their assessment processes. This first section focusses on the 'requirements organisations make towards funded projects'. The next section will focus on 'researcher assessment at application stage'.

*** Does your organisation currently include Open Science or any of its elements as part of its funding requirements for funded projects?**

- Yes, for all funding programmes
- Yes, for some funding programmes
- No, but we plan to add this in the future
- No, and we currently do not have plans to do so

Please provide additional information and/or links to any relevant documents

*** [IF RELEVANT] Which of the following elements of open science does your organisation include as part of its funding requirements for funded projects?**

In the next questions, you will be able to further specify these requirements.

- Open access to research articles
- Open access to research books
- Findable, Accessible, Interoperable, Re-usable (FAIR) research data (including for example data management plans)
- Open access to research data (including for example metadata)
- Open source research software, code, and tools (including for example software management plans)
- Open hardware
- Open research methods (such as pre-registration of study designs, open protocols and workflows)
- Open evaluation (including for example open peer review, open and transparent indicators/metrics)
- Open research infrastructure
- Stakeholder engagement with industry partners, policy makers, and/or the public (including for example science communication)
- Citizen science
- Open education
- Service and leadership (such as engagement in open science policy development, teaching, and/or supervision)
- None of the above
- Other: _____

Please provide additional information and/or links to any relevant documents

* For each element of open science selected in the previous question as part of funding requirements for funded projects, what is the main way in which information is collected at application stage?

| | Through dedicated criteria | Through a dedicated question or section | Requested as part of a narrative description | Considered if included in narrative description |
|---|----------------------------|---|--|---|
| Open access to research articles | | | | |
| Open access to research books | | | | |
| Findable, Accessible, Interoperable, Re-usable (FAIR) research data | | | | |
| Open access to research data | | | | |
| Open source research software, code, and tools | | | | |
| Open hardware | | | | |
| Open research methods | | | | |
| Open evaluation | | | | |
| Open research infrastructure | | | | |
| Stakeholder engagement with industry partners, policy makers, and/or the public | | | | |
| Citizen science | | | | |
| Open education | | | | |
| Service and leadership | | | | |
| Other | | | | |

Please provide additional information and/or links to any relevant documents

* **[IF RELEVANT]** For elements currently included in funding requirements for funded projects, what types of support are provided to applicants?

- Guidance documents
- Training provision
- Support staff

- Tools and platforms (including for example infrastructure)
- No support
- I do not know
- Other: _____

Please provide additional information and/or links to any relevant documents

For any of the topics raised in the questions in this section, does your organisation have plans to review its policies and practices?

- Yes
- No

Please provide additional information

Open Science in Research Assessment: Researcher Recognition for Open Science

How is open science included in the assessment of research and/or researchers by your organisation? This part of the survey looks at the breadth and coverage of current and planned research assessment practices for open science, the extent to which individual element of open science are supported and assessed, as well as the direction of travel for future changes.

Researcher recognition for open science

For Research Funding Organisations, this section refers to the assessment of researchers at project application stage. For Research Performing Organisations, this section refers to the assessment of researchers during recruitment of promotion processes. In both cases, the questions relate to the assessment of a researcher's track record.

- * Does your organisation currently recognise elements of Open Science in its researcher recognition processes?

In the next question, you will be able to further specify the elements of Open Science that are included in your approach.

- Yes, for all funding programmes or career progression exercises
- Yes, for some funding programmes or career progression exercises
- No, but we plan to add this in the future
- No, and we currently do not have plans to do so

Please provide additional information and/or links to any relevant documents

* **[IF RELEVANT]** Which of the following elements of Open Science does your organisation recognise in its process(es) for researcher recognition?

- Open access to research articles
- Open access to research books
- Findable, Accessible, Interoperable, Re-usable (FAIR) research data (including for example data management plans)
- Open access to research data (including for example metadata)
- Open source research software, code, and tools (including for example software management plans)
- Open hardware
- Open research methods (such as pre-registration of study designs, open protocols and workflows)
- Open evaluation (including for example open peer review, open and transparent indicators/metrics)
- Open research infrastructure
- Stakeholder engagement with industry partners, policy makers, and/or the public (including for example science communication)
- Citizen science
- Open education
- Service and leadership (such as engagement in open science policy development, teaching, and/or supervision)
- None of the above
- Other: _____

Please provide additional information and/or links to any relevant documents

* For elements of Open Science recognised in process(es) for researcher recognition, what is the main way in which information is collected?

| | Through dedicated criteria | Through a dedicated question or section | Requested as part of a narrative description | Considered if included in narrative description |
|---|----------------------------|---|--|---|
| Open access to research articles | | | | |
| Open access to research books | | | | |
| Findable, Accessible, Interoperable, Re-usable (FAIR) research data | | | | |
| Open access to research data | | | | |
| Open source research software, code, and tools | | | | |
| Open hardware | | | | |
| Open research methods | | | | |
| Open evaluation | | | | |

| | Through dedicated criteria | Through a dedicated question or section | Requested as part of a narrative description | Considered if included in narrative description |
|---|----------------------------|---|--|---|
| Open research infrastructure | | | | |
| Stakeholder engagement with industry partners, policy makers, and/or the public | | | | |
| Citizen science | | | | |
| Open education | | | | |
| Service and leadership | | | | |
| Other | | | | |

Please provide additional information and/or links to any relevant documents

* **[IF RELEVANT]** For elements currently recognised, what types of support are provided to applicants?

- Guidance documents
- Training provision
- Support staff
- Tools and platforms (including for example infrastructure)
- No support
- I do not know
- Other: _____

Please provide additional information and/or links to any relevant documents

For any of the topics raised in the questions in this section, does your organisation have plans to review its policies and practices?

- Yes
- No

Please provide additional information

Monitoring of and Evidence Gathering for Open Science

This part of the survey explores the open science monitoring mechanisms that organisations have in place, as well as the evidence base they use to justify their strategic and practical engagement with open science.

Monitoring of Open Science

* Does your organisation have an open science monitoring mechanism in place for research outputs emanating from its funding and/or research outputs produced by affiliated researchers?

- Yes
- No, but we plan to develop one in the future
- No, and we do not have plans to develop one
- I do not know

* **[IF RELEVANT]** Which elements of Open Science are included in the monitoring mechanism of your organisation?

- Open access to research articles
- Open access to research books
- Findable, Accessible, Interoperable, Re-usable (FAIR) research data (including for example data management plans)
- Open access to research data (including for example metadata)
- Open source research software, code, and tools (including for example software management plans)
- Open hardware
- Open research methods (such as pre-registration of study designs, open protocols and workflows)
- Open evaluation (including for example open peer review, open and transparent indicators/metrics)
- Open research infrastructure
- Stakeholder engagement with industry partners, policy makers, and/or the public (including for example science communication)
- Citizen science
- Open education
- Service and leadership (such as engagement in open science policy development, teaching, and/or supervision)
- None of the above
- Other: _____

Please provide additional information and/or links to any relevant documents

* **[IF RELEVANT]** How does your organisation monitor open science? What are the main sources of information and which methods and tools are used to collect and interpret this information? Please provide links to relevant documents.

* **[IF RELEVANT]** What is/are the purpose(s) of the information your organisation collects through its open science monitoring mechanism?

- To guide policy development
- Evaluation
- Compliance assessment
- Implementation of supporting measures
- Investigate changes over time

- Negotiations with publishers
- Communication towards individual disciplines, institutions, or scholars
- I do not know
- Other: _____

*** Does your organisation make openly available the research information it produces?**

This refers to information (sometimes called metadata) related to the governance and administration of research by your organisation.

- Yes, all research information
- Yes, some research information
- No, but we plan to do so in the future
- No, and we do not have plans to do so
- I do not know

Evidence Gathering for Open Science

*** Does your organisation commission, fund, and/or perform evidence-gathering activities related to Open Science?**

- Yes, we commission evidence-gathering activities
- Yes, we fund evidence-gathering activities
- Yes, we perform evidence-gathering activities
- No, but we plan to do this in the future
- No, and we do not have plans to do this
- I do not know

*** [IF RELEVANT] What is the purpose of the evidence related to open science your organisation collects through the activities it commissions, funds, and/or performs?**

- Evidence gathering
- To guide policy development
- Implementation of supporting measures, incl. research assessment
- I do not know
- Other: _____

[IF RELEVANT] Please provide any further information on the evidence-gathering activities related to Open Science that your organisation commissions, funds, and/or performs at present or in the future

Further Information

Do you have any further information you would like to provide that might be relevant to this membership consultation?



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